

CLAIMS

[1] A method of improving smoothness during washing of an item to be washed, comprising the step of washing the item with a washing liquid under conditions where an organic polymer having spinnability is present in the washing liquid.

[2] A method of improving smoothness during hand-washing of an item to be washed, comprising the step of hand-washing the item with a washing liquid under conditions where an organic polymer having spinnability is present in the washing liquid.

[3] A process for hand-washing comprising the step of hand-washing an item to be washed with a washing liquid showing spinnability comprising an organic polymer having spinnability, or with a washing liquid prepared by diluting the washing liquid with more than 1-fold to 1,000-fold amount of water.

[4] The process according to claim 3, wherein the washing liquid has a pH of 9.0 or more.

[5] A detergent composition for improving smoothness, comprising an organic polymer having spinnability having an average molecular weight of 1,500,000 or more in an amount exceeding 0.1% by weight of the detergent composition.

[6] The detergent composition according to claim 5, wherein the detergent composition comprises:

(a) an organic polymer having spinnability having an average molecular weight of 1,500,000 or more in an amount exceeding 0.1% by weight;

- (b) a surfactant;
- (c) an alkalizing agent; and
- (d) a metal ion capturing agent.

[7] The detergent composition according to claim 5, wherein the
5 detergent composition comprises:

- (a) a polyethylene oxide having spinnability having an average molecular weight of 1,500,000 or more in an amount exceeding 0.1% by weight;

(b-1) an anionic surfactant in an amount of 10% or more;

10 (c) an alkalizing agent; and

(d) a metal ion capturing agent,

wherein the detergent composition essentially consists of no polyoxyethylene alkyl ether (b-2).

[8] The detergent composition according to any one of claims 5 to 7,
15 wherein the detergent composition is in a powdery form or granular form.

[9] The detergent composition according to any one of claims 5 to 8,
further comprising an inorganic salt capable of releasing hydrogen
peroxide in water, wherein the inorganic salt is contained in an amount of
15% by weight or less of the detergent composition.

20 [10] A laundry detergent composition comprising a polymer having an average molecular weight of 500,000 or more, wherein 60% by mole or more of constituting monomers has a sulfonic acid group or a salt form thereof, or a sulfuric acid group or a salt form thereof.

[11] The laundry detergent composition according to claim 10, wherein
25 the laundry detergent composition is in a powdery form or granular form.

[12] The laundry detergent composition according to claim 10 or 11, wherein the detergent composition comprises:

(a') a polymer having an average molecular weight of 500,000 or more, wherein 60% by mole or more of constituting monomers has a sulfonic acid group or a salt form thereof, or sulfuric acid group or a salt form thereof;

(b) a surfactant;

(c) an alkalizing agent; and

(d) a metal ion capturing agent.

5 [13] The laundry detergent composition according to any one of claims 10 to 12, wherein the constituting monomer is a unit derived from one or more monomers selected from the group consisting of 2-acrylamide-2-methylpropanesulfonic acid and a salt thereof, and styrenesulfonic acid and a salt thereof.

10 [14] A creamy smoothness improver comprising an organic polymer having spinnability having an average molecular weight of 1,500,000 or more in an amount exceeding 0.1% by weight of the creamy smoothness improver.

15 [15] The creamy smoothness improver according to claim 14, wherein the organic polymer is a polymer or copolymer made of a monomer selected from the group consisting of acrylic acid, acrylamide, acrylamide methylpropanesulfonic acid, dimethylaminoethyl methacrylic acid, vinyl alcohol, and mixtures thereof; a polysaccharide having a sugar backbone; or a polypeptide.

20 [16] The creamy smoothness improver according to claim 14, wherein

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the organic polymer is a polyethylene oxide, and essentially consists of no polyoxyalkylene alkyl ether.

[17] A creamy smoothness improver comprising a polymer having an average molecular weight of 500,000 or more, wherein 60% by mole or 5 more of constituting monomers have a sulfonic acid group or a salt form thereof, or sulfuric acid group or a salt form thereof.

[18] The creamy smoothness improver according to claim 17, wherein the constituting monomer is a unit derived from one or more monomers selected from the group consisting of 2-acrylamide-2-methylpropanesulfonic acid or a salt thereof, and styrenesulfonic acid or a 10 salt thereof.

[19] A process for washing an item to be washed with the laundry detergent composition as defined in claim 10.

[20] A process for washing an item to be washed with the creamy 15 smoothness improver as defined in claim 17.